



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0731; Directorate Identifier 2010-NE-39-AD; Amendment 39-16886; AD 2011-25-10]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Corp. (PW) JT9D-7R4H1 Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all PW JT9D-7R4H1 turbofan engines. This AD was prompted by reports of cracks in five high-pressure compressor (HPC) shafts. This AD requires removing certain HPC shafts before their certified life limits and establishes a new, lower life-limit for these parts. We are issuing this AD to correct the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; phone: 860-565-1605. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket

Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Stephen K. Sheely, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; e-mail: stephen.k.sheely@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on July 13, 2011 (76 FR 41144). That NPRM proposed to require:

- For HPC shafts that have more than 4,500 cycles-since-new (CSN) on the effective date of this AD, removing the HPC shaft from service within 500 cycles-in-service (CIS) after the effective date of this AD or at the next shop visit after the effective date of this AD, whichever occurs first.
- For HPC shafts that have 4,500 or fewer CSN on the effective date of this AD, removing the HPC shaft from service before exceeding 5,000 CSN.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and the FAA's response to this comment.

Request to Clarify Exemption for JT9D-7R4E1 and JT9D-7R4E1H Engine Models

One commenter, FedEx Express, requested that the FAA clearly state the exemption of JT9D-7R4E1 and -7R4E1H engine models from this requirement.

We partially agree. We do not agree that it is necessary to specifically exempt the JT9D-7R4E1 and -7R4E1H engine models because the Applicability paragraph clearly states that this AD applies only to the PW JT9D-7R4H1 turbofan engine model. All other models (including the JT9D-7R4E1 and -7R4E1H models) are automatically excluded from the compliance requirements. However, we do agree that the installation prohibition statement could be misinterpreted to go beyond the scope of the AD applicability. Therefore, we revised this AD by adding “JT9D-7R4H1” to paragraph (i)(2).

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 41144, July 13, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 41144, July 13, 2011).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD does not affect any engines installed on airplanes of U.S. registry.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2011-25-10 **Pratt & Whitney Corp**: Amendment 39-16886; Docket No. FAA-2011-0731; Directorate Identifier 2010-NE-39-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

Pratt & Whitney Corp (PW) JT9D-7R4H1 turbofan engines with a high-pressure compressor (HPC) shaft, part number (P/N) 808070 or 808071, installed.

(d) Unsafe Condition

This AD was prompted by reports of cracks in five HPC shafts. We are issuing this AD to correct the unsafe condition on these products.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(f) Engines with an HPC Shaft, P/N 808071, that has More than 4,500 Cycles-Since-New (CSN)

For engines with an HPC shaft, P/N 808071, that has more than 4,500 CSN on the effective date of this AD, remove the HPC shaft from service within 500 cycles-in-service (CIS) after the effective date of the AD or at piece-part exposure, whichever occurs first.

(g) Engines with an HPC Shaft, P/N 808071, that has 4,500 or Fewer CSN

For engines with an HPC shaft, P/N 808071, that has 4,500 or fewer CSN on the effective date of this AD, remove the HPC shaft from service before exceeding 5,000 CSN.

(h) Engines with an HPC Shaft, P/N 808070, Removal from Service

For engines with an HPC shaft, P/N 808070, remove the HPC shaft, P/N 808070, from service before exceeding 1,200 CSN.

(i) Installation Prohibition

(1) After the effective date of this AD, do not install or reinstall into any engine any HPC shaft removed in accordance with paragraphs (f), (g), or (h) of this AD.

(2) After the effective date of this AD, do not install or reinstall into any JT9D-7R4H1 engine:

(i) Any HPC shaft, P/N 808071, that is at piece-part exposure and exceeds the new lower life limit of 5,000 CSN, or

(ii) Any HPC shaft, P/N 808070, that is at piece-part exposure and exceeds the new lower life limit of 1,200 CSN.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(k) Related Information

For more information about this AD, contact Stephen K. Sheely, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; e-mail: stephen.k.sheely@faa.gov.

(l) Material Incorporated by Reference

None.

Issued in Burlington, MA on November 29, 2011.

Peter A. White,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2011-31342 Filed 12/09/2011 at 8:45 am; Publication Date: 12/12/2011]